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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,241	09/22/1998	ANDRE JOUANNEAU		8350

7590 10/24/2003

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EXAMINER	
BEHREND, HARVEY E	
ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SW

Office Action Summary

Application No.	Applicant(s)
09/155,241	Jouanneau
Examiner	**Group Art Unit**
Behrend	3681

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum ~~of thirty~~ (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 8/28/03.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-38 is/are pending in the application.

Of the above claim(s) 13-38 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☒ Notice of References Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other _____

Office Action Summary

1. Since this is on RCE, the previous elections are carried forward (note section 1 on page 2 of the 4/19/01 office action).

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The specification is objection to under 35 U.S.C. 112, first paragraph, as failing to provide an adequate written description of the invention and as failing to adequately teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure, for the reasons set forth in section 3 of the 2/24/03 Office action.

Applicants arguments are unpersuasion for reasons already of record.

Applicants arguments appear based on his "belief" or "desire" or "contention", that hydrogen isotopes will exist inside his cathode as nuclei (i.e. protons, deuterons or tritons) and, that hydrogen isotopes exist in the prior art such as that of Pons et al or Williams et al, only as atoms or molecules.

However, as previously pointed out by the examiner, applicant has presented no factual evidence to support his "belief", or "desire" or "contention".

The examiner (see for example, pages 5 and 6 of the 2/24/03 Office action) had directed applicants attention to specific portions of Pons et al which stated that the isotopic hydrogen inside the metal lattice of the cathode was in the form of nuclei (i.e.

protons, deuterons and tritons) (nuclei are not atoms) and, that the isotopic hydrogen in the metal lattice (cathode) exist predominantly as freely, highly mobile nuclei.

In response, applicant alleges that these statements in Pons et al are false (see for example page 27 of the 8/28/03 response).

However, applicant has presented no factual evidence whatsoever to support his unfounded allegations that such statements in Pons et al are false.

Applicant argues on page 24 of the 8/28/03 response that in his case the nucleic are free to move inside the lattice (cathode) and because they are free to move, they can move within a very close distance (which distance however, is undefined) of each other and this allows the formation of a stable plasma inside the lattice (however, without any reputable factual evidence in support thereof, these statements by applicant are no more than unfounded speculation and assumptions).

Note in regard to this issue of a "stable plasma" that the examiner had already held applicants disclosure insufficient as to how and in what manner, the "plasma" can be considered "stable" and, be maintained in "stable" form for several hours without significant difficulty, as stated on page 2 lines 9+ of applicants specification.

Applicant still has not presented any reputable factual evidence showing why nor how and in what manner, isotopic hydrogen can exist inside his cathode as nuclei (plasma) but, in such prior art systems of Pons et al, the isotopic hydrogen can allegedly only exists as atoms (despite the specific statements in Pons et al to the contrary).

It is noted that applicant is still arguing that it is critical for the formation of isotopic hydrogen in the form of nuclei (plasma) inside the cathode, for the pH of the

electrolyte solution to be less than one. However, as previously pointed out to applicant (see for example, page 4 of the 2/24/03 Office action), this argument is not supported by applicants own specification!

Applicant has presented no valid reasons why one should now, after the actual filing of this application by applicant in the Office, ignore or disregard or pretend as non-existent, certain portions of applicants specification.

Additionally, since claims 5, 6, 10-12 do not recite the limitation that the pH is less than one (which applicant has indicated on pages 2 and 12 of the 10/21/02 response as being critical to his invention of forming a plasma) nor do all claims recite vibrating the cathode (which applicant indicates on page 12 of the 10/21/02 response as also being critical to his invention of forming a plasma), the claims are not enabled by the disclosure. See MPEP 2164.08(c) and In re Mayhew, 188 USPQ 356, 358.

Applicants unsupported allegations concerning the other issues raised by the examiner, do not remove these issues from contention.

Accordingly, all issues set forth in said section 3 of the 2/24/03 Office action (which refers back to section 3 of the 4/19/01 Office action) are still considered pertinent in determining patentability of applicants claims.

4. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, for the reason set forth in the objection to the specification, in section 3 above.

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-12 are rejected under 35 U.S.C. 101 because the inventions as disclosed is inoperative and therefore lacks utility, for the reasons set forth in section 3 above and in section 6 of the 2/24/03 Office action.

Note the discussion of applicants arguments in section 3 above.

Note that the examiner in said section 6 of the 2/24/03 Office action had stated that "if applicant actually is able to create "plasma" in his cathode whereas the systems of Williams et al, etc., cannot, it is only because applicants invention actually utilizes some additional apparently critical but non-disclosed features/parameters, etc., which enables applicants invention to be operative to produce plasma in the cathode, and, which are presumably lacking in systems such as that of Williams et al and Pons et al".

However, applicant has not identified said "additional apparently critical but non-disclosed features, parameters, etc., which enables applicants invention to be operative to produce plasma in the cathode, and, which are presumably lacking in systems such as that of Williams et al and Pons et al.

7. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the reasons set forth in section 7 of the 2/24/03 Office action.

Applicants arguments are unpersuasive.

As previously pointed out to applicant and as discussed again in section 3 above, Pons et al specifically state that the isotopic hydrogen exists inside the cathode as

freely highly mobile nuclei (which is exactly what applicant argues is the situation in his cathode).

As pointed out on page 8 of the 2/24/03 Office action, applicants claims are incomplete in failing to recite all of the parameters, applicant argues as being critical to the production of "plasma" in the cathode. It is noted that applicant is still arguing such parameters as being critical for the production of "plasma" in the cathode (see for example, pages 17. 18, 34, 38 of the 8/28/02 response). Since all claims do not recite each of these features which applicant has now argued as being critical, the claims fail to comply with 35 USC 112 second paragraph in failing to point out and distinctly claim the invention. See MPEP 2172.01 and In re Venezia, 189 USPQ 149 (CCPA 1976); In re Collier, 158 USPQ 266 (CCPA 1968).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by any of Williams et al, Pons et al, Ormorit, Kubota or Makoto, for the reasons set forth in section 9 of the 2/24/03 Office action.

Applicants arguments have been considered but they are unpersuasive.

The claims in question read on an ionic solution with a pH greater than one, even a basic solution which applicants own specification states in sufficient to cause the formation of "plasma" in the cathode.

10. Claims 5, 6, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by any of Bellanger et al, Schulten et al, Buechler, Lovelock (I) or Pavelle et al, for the reasons set forth in section 10 of the 2/24/03 Office action.

Note the discussion of applicants arguments in section 9 above.

11. Claims 1-4, 7-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any of Jouanneau et al, Haeffner, Cedzynska et al, Williams et al, Dapperheld et al or Astakhov et al.

The references each illustrate electrochemical systems which inherently produce hydrogen. Each reference illustrates a bath that inherently has a pH less than one.

Applicants specification states that a hydrogen isotope "plasma" will inherently be produced in the cathode.

However, since the structure and method of operation of each reference is the same as that recited in the claims, each reference must inherently function in the same manner, to produce the same result as that of applicant.

As to limitations which are considered to be inherent in a reference, note the case law of In re Ludtke, 169 USPQ 563, In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594, In re Best et al, 195 USPQ 430, and In re Brown, 173 USPQ 685, 688.

12. Claims 1-4, 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Jouanneau et al, Haeffner, Cedzynska et al, Williams et al, Dapperheld et al or Astakhov et al as applied to claims 1-4, 7-12 above, and further in view of Doke et al.

Doke et al show it is old and advantageous in the art to utilize a vibrating electrode and, to so modify any of the primary references would accordingly have been prima facie obvious.

13. The other references cited further illustrate pertinent art.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harvey Behrend whose telephone number is (703) 305-1831. The examiner can normally be reached on Tuesday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

HARVEY E. BEHREND
PRIMARY EXAMINER